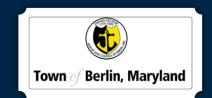


Town of Berlin Stormwater Management Projects Update

Prepared for:

Town of Berlin
Community Meeting

Prepared by:





EA Engineering, Science, and Technology, Inc., PBC



Presented by:

Darl Kolar, PE April 18, 2023

Agenda

STORMWATER MANAGEMENT PROJECTS

Pine Street, Franklin Avenue and Nelson Street Stormwater Retrofits
 Construction

 Abbey Lane, Westminster Drive, and Upshur Lane Submerged Gravel Wetland Design

Hudson Branch Stream Restoration Design and Permitting



Pine Street, Franklin Avenue and Nelson Street Stormwater Retrofits

Background

- Construction of Third of Three Phases
 - Phase I was Main St., Cedar Ave. and Maple Dr.
 - Phase II was the Graham Ave.
 Submerged Gravel Wetland
- Within one of the worst current flood prone areas of Town.
- Project includes construction of stormwater management piping, inlets, water/wastewater services and roadway improvements.





Pine Street, Franklin Avenue and Nelson Street Stormwater Retrofits

Project Description

- Approximate quantity of key stormwater improvement items
 - 1,300 linear feet of elliptical reinforced concrete pipe
 - 1,700 linear feet of curb and gutter
 - 800 square yards of sidewalk
 - 2,500 square yards of pavement restoration
 - 2,100 square yards of pavement mill and overlay
- Stormwater manholes and inlets
- Water and sewer connection services
- Build America, Buy America Act Requirements





Pine Street, Franklin Avenue and Nelson Street Stormwater Retrofits

Project Schedule



Design Completed: April 2023

Bid Advertisement: May – June 2023

Contractor Award: June 2023

Construction: June – December 2023

Project Closeout: December 2023



Abbey Lane, Westminster Drive, and Upshur Lane Submerged Gravel Wetland Design

Background

- Headwater of one of the largest undersized underground storm drainage conveyance systems in Town.
- Regular flooding at intersection of West St. and Abbey Lane, plus surrounding effected areas
- Grant Application through Chesapeake Bay Trust
 - Application submitted August 2022
 - Grant Award February 2023
- Project includes design of up to three stormwater facilities.

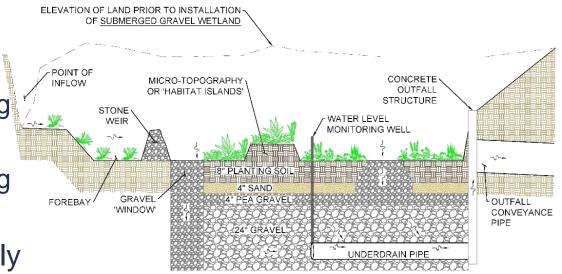




Abbey Lane, Westminster Drive, and Upshur Lane Submerged Gravel Wetland Design

Project Description

- Up to Three Stormwater Facilities
 - Primary Objective: New SWM Facility on Paper Street / Grass Open Area within Buckingham Estates
 - Secondary Objective #1: Retrofit of existing Buckingham Estates SWM facility
 - Secondary Objective #2: Retrofit of existing Burley Heights SWM Facility
- Up to 28,500 square feet of environmentally sensitive stormwater management facilities
- Relocation/Rerouting of existing water main
- Aid in reducing flooding.





Abbey Lane, Westminster Drive, and Upshur Lane Submerged Gravel Wetland Design





Pre-Design: April - June 2023

Design: June – August 2023

Permitting: July - October 2023

Project Closeout: December 31, 2023



Hudson Branch Stream Restoration Design and Permitting

Background

- Final Section of Hudson Branch prior to existing Town Limits
- Stream Degradation: Bank Erosion, Stream Incision, Disconnection from Floodplain
- Sanitary Trunk Main crosses the branch above grade.
 - Photos include both dry and fully submerged conditions
- Bank instability threatening Bottle Branch
 Road and adjacent property owners







Hudson Branch Stream Restoration Design and Permitting

Project Description

- Stream Restoration / Stabilization Design
 - Approximately 2,300 linear feet of Hudson Branch.
 - Assateague Road to the Wastewater Treatment Plant.
- Natural Stream Bank Stabilization near Assateague Road
- Step-Pool Conveyance Systems
- Reconnection to Floodplain
- Protection of Critical Infrastructure





Hudson Branch Stream Restoration Design and Permitting

Project Schedule



Predesign:

Design:

Permitting:

Project Closeout:

April – June 2023

July – March 2024

October 2023 – May 2024

May 30, 2024



Project Funding

Funding Sources:

- Chesapeake Bay Trust Grant
- Maryland Coastal Bays Program Environmental Protection Agency Bipartisan Infrastructure Law
- Town of Berlin













Questions?

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